Visual Aids

California Education and the Environment Initiative

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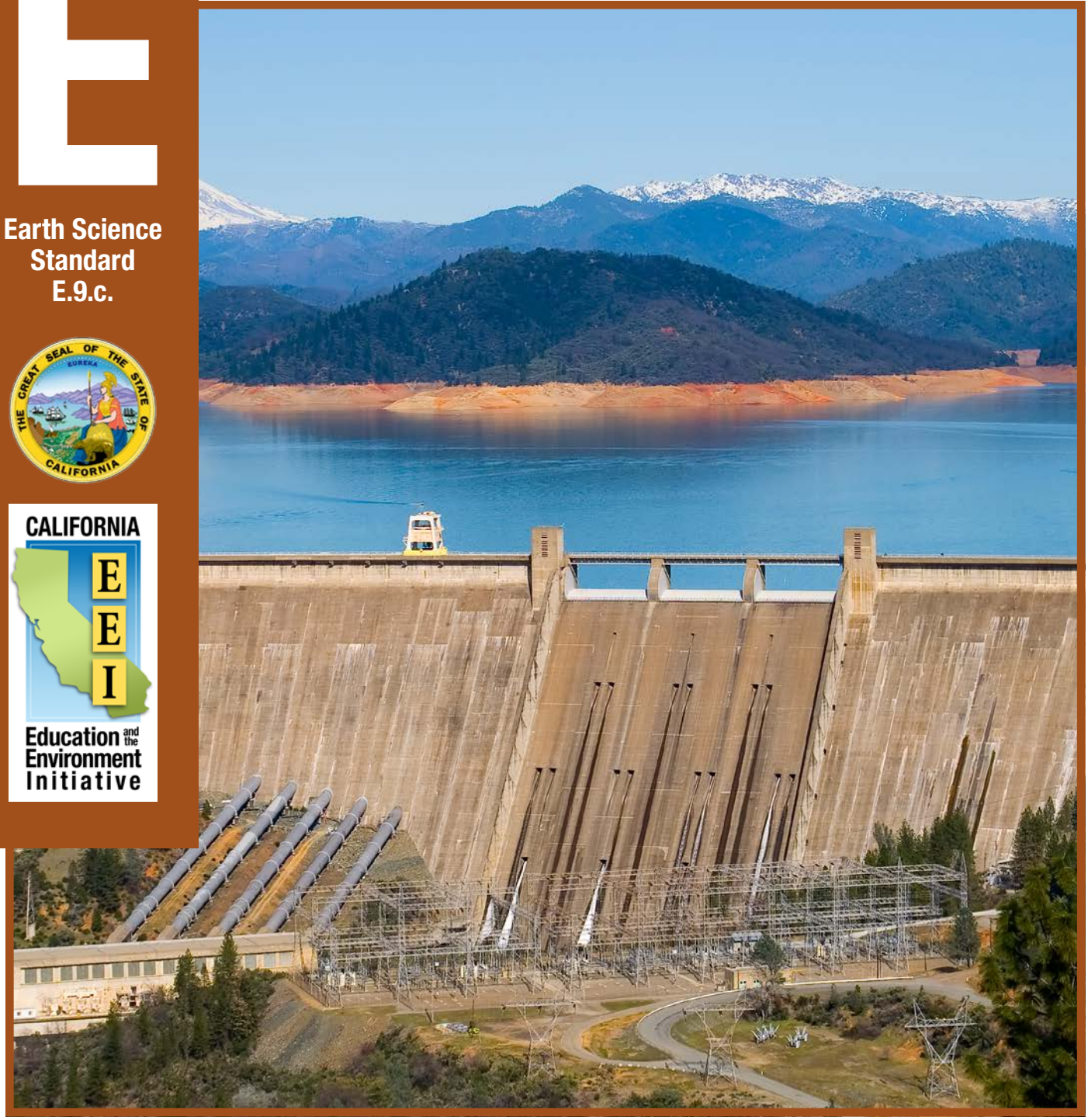
Earth Science Standard E.9.c.



Liquid Gold: California's Water

California Education and the Environment Initiative

Approved by the California State Board of Education, 2010

The Education and the Environment Initiative Curriculum is a cooperative endeavor of the following entities:

California Environmental Protection Agency

California Natural Resources Agency

California State Board of Education

California Department of Education

Department of Resources Recycling and Recovery (CalRecycle)

Key Partners:

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Office of Education and the Environment

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None required for this lesson.

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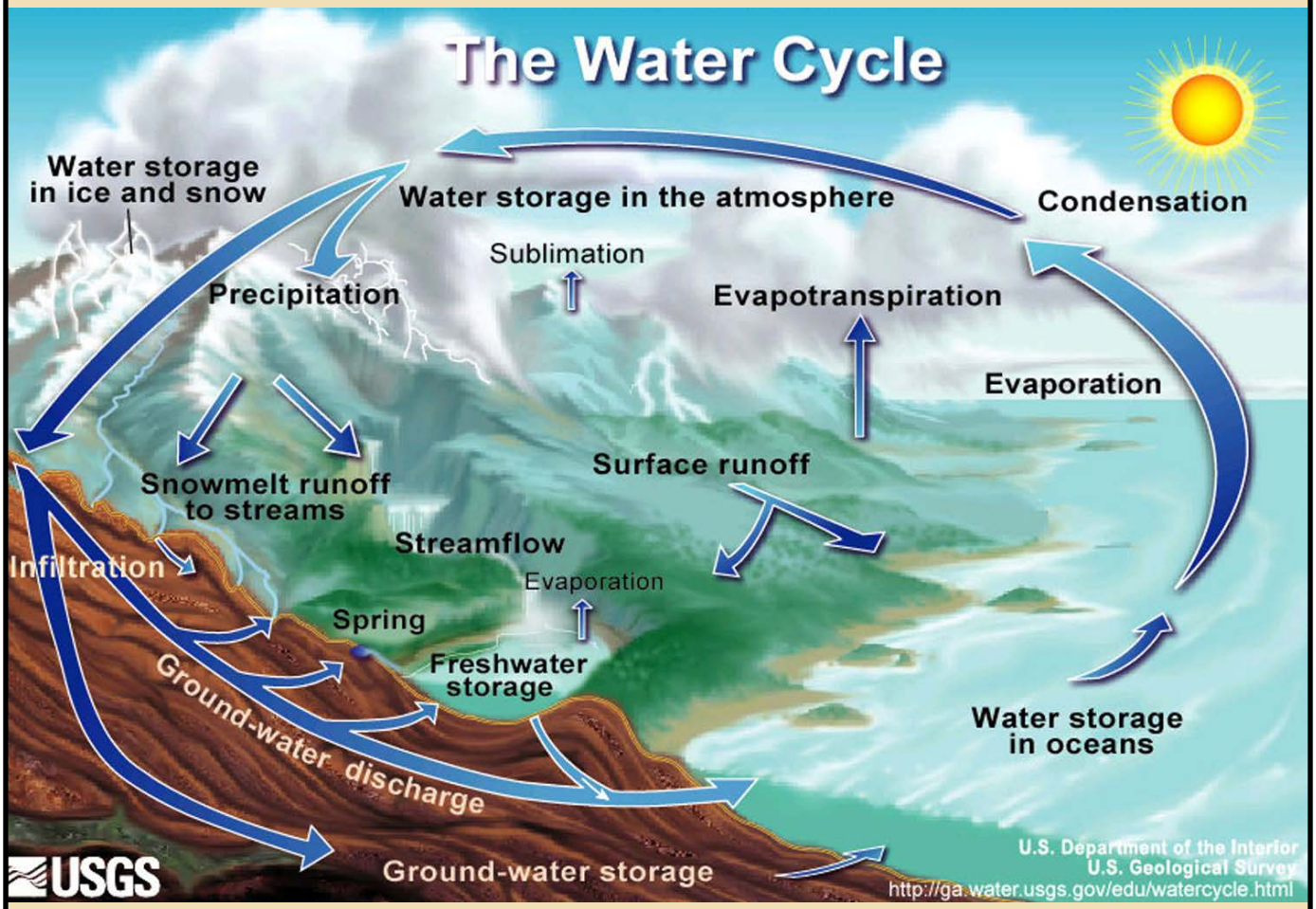
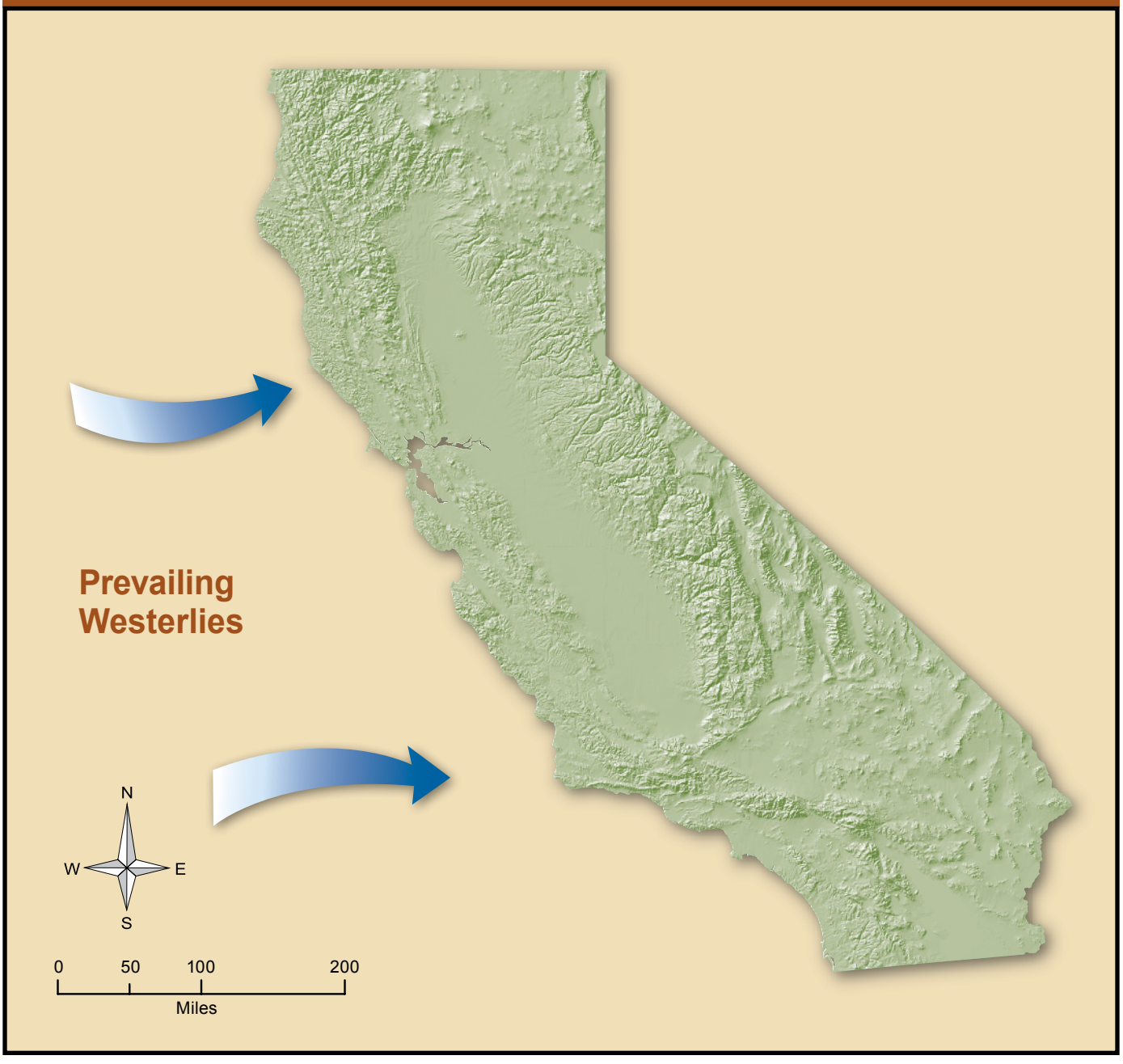
VA #1 Hydrologic Cycle

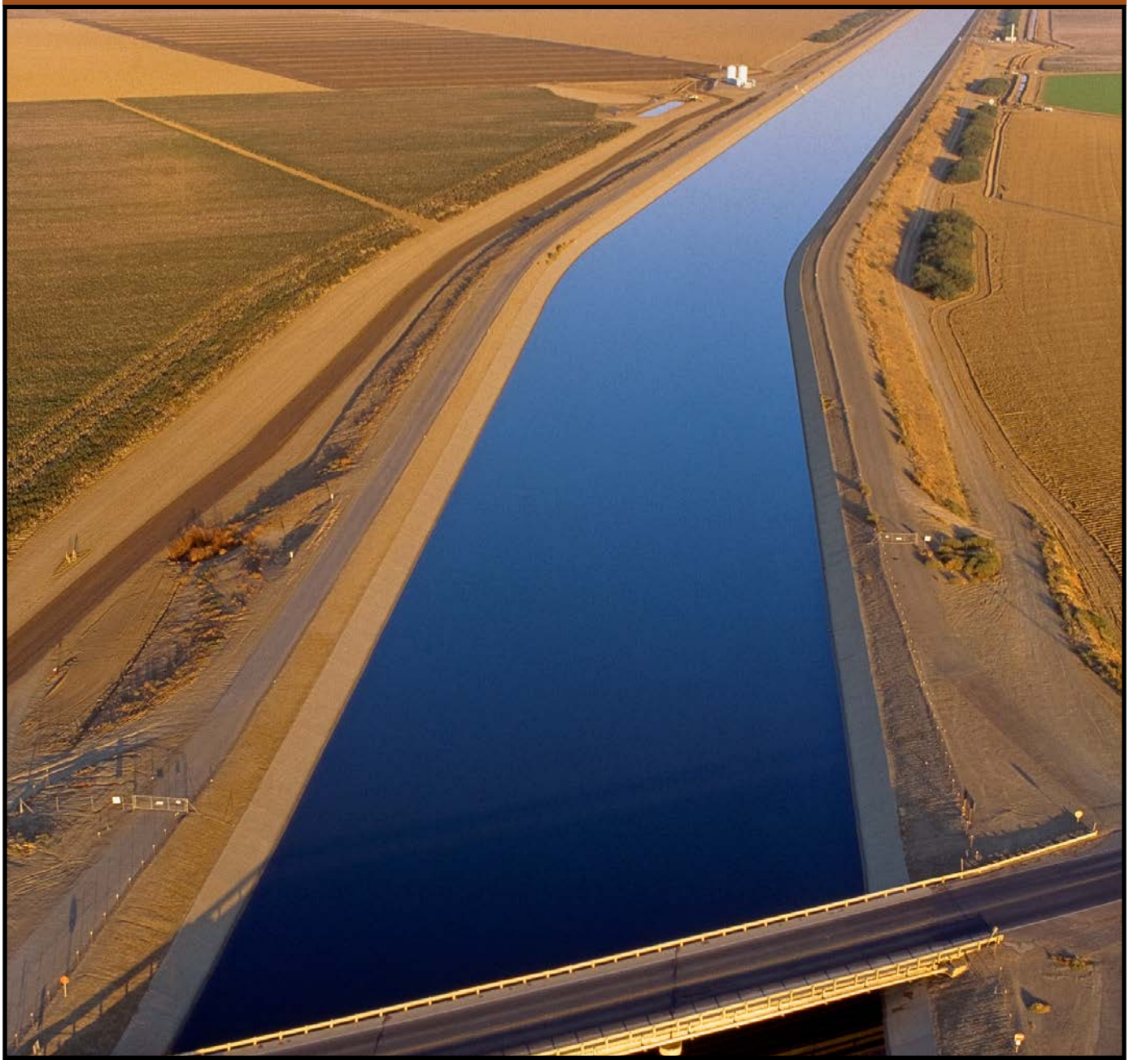


VA #2 Prevailing Wind Currents



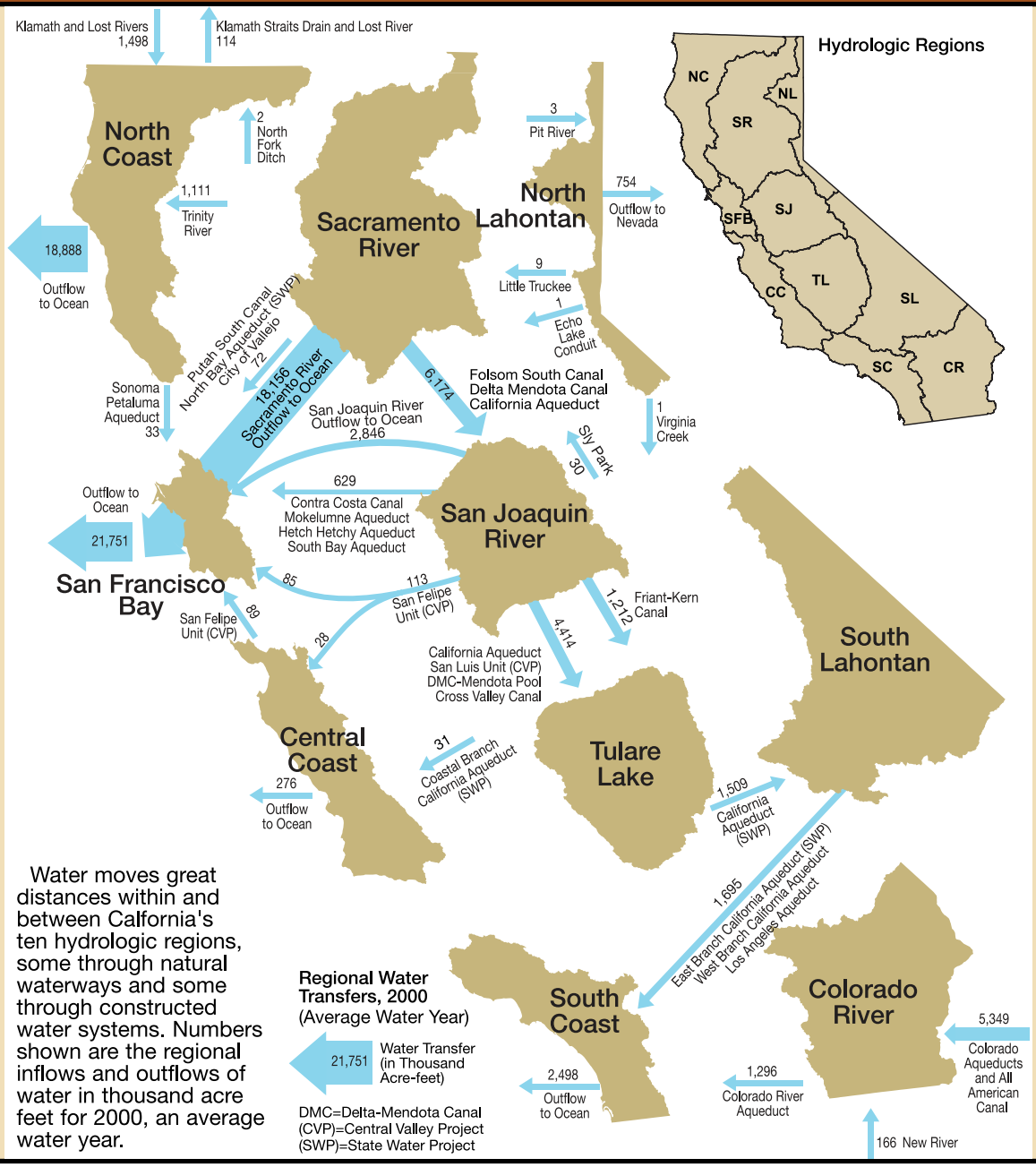
VA #3 California's Hydrologic Regions

VA #4 The California Aqueduct



VA #5 State Water Project

VA #6 Regional Water Transfers



VA #7 Central Valley Project

VA #8 Local Water Projects

VA #9 The Delta Smelt and Salty Lands

VA #10 Delta Vision Recommendations

Goal 1: Legally acknowledge the co-equal goals of restoring the Delta ecosystem and creating a more reliable water supply for California.

Goal 2: Recognize and enhance the unique cultural, recreational, and agricultural values of the California Delta as an evolving place, an action critical to achieving the co-equal goals.

Goal 3: Restore the Delta ecosystem as the heart of a healthy estuary.

Goal 4: Promote statewide water conservation, efficiency, and sustainable use.

Goal 5: Build facilities to improve the existing water conveyance system and expand statewide storage, and operate both to achieve the co-equal goals.

Goal 6: Reduce risks to people, property, and state interests in the Delta by effective emergency preparedness, appropriate land uses, and strategic levee investments.

Goal 7: Establish a new governance structure with the authority, responsibility, accountability, scientific support, and secure funding to achieve these goals.

VA #11 California's Annual Water Budget

California's Water Budget	Quantity of Water
Precipitation and Imported Water	200 million acre-feet
Used in Evaporation/Transpiration (plants)	-130 million acre-feet
Total Runoff	**70 million acre-feet**

Available from Runoff	70 million acre-feet
Outflow to Pacific Ocean	-21 million acre-feet
Total Runoff Stored in Reservoirs	**49 million acre-feet**

Stored in Reservoirs	**49 million acre-feet**
Used for Agriculture	- > 20 million acre-feet
Used for Urban Purposes	- > 5 million acre-feet
Allocated to Ecosystems (Instream)	- > 25 million acre-feet

Note: By the year 2030, experts believe that California's water use will increase by 4 million acre-feet. Current precipitation amounts have remained unchanged for thousands of years. In the future, climate change may influence the amount of water produced by natural sources, and Californians should be prepared for less water from natural sources.

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